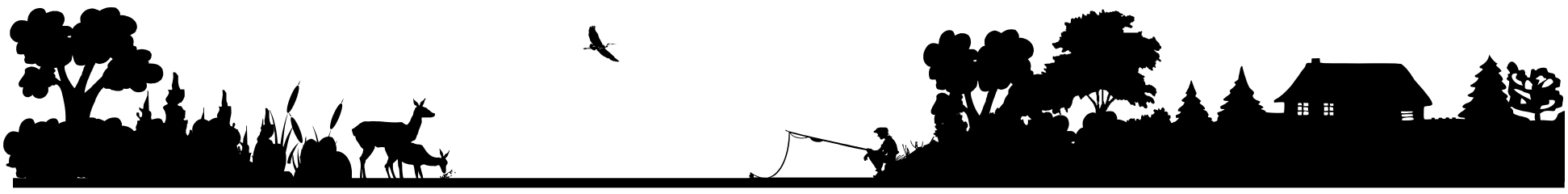


Northwoods Journal – July 2010

A Free Publication About Enjoying and Protecting Marinette County's Outdoor Life

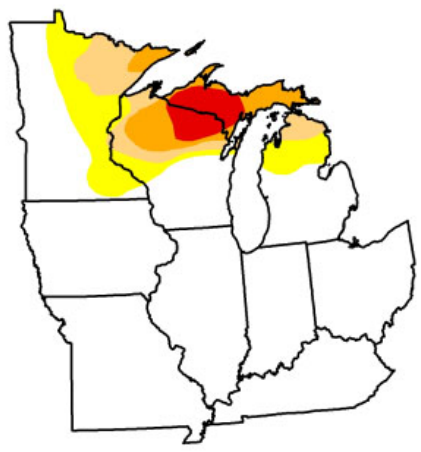
In This Issue:

Meet our Summer Intern!

I'm Ben Brown, the conservation intern for the Land Information Department in Marinette County this summer. So far, I have enjoyed getting out in the county and doing field work. I'm looking forward to the upcoming lake surveys we will be doing this July. The staff here is very friendly and fun to work with. I'm going to my best to learn as much as I can from them before I return to Stevens Point in the fall. I will be a senior at UW-Stevens Point, majoring in Water Resources and I plan to graduate in the spring of 2011. I'm most interested in the physical aspects of water, not so much the chemistry. I strongly enjoy hunting, fishing, and just spending time in the outdoors. I grew up on a beef farm in Waukesha County where I developed my love for the outdoors. I'm planning on taking advantage of the outdoor recreational opportunities here in Marinette County as much as possible this summer.

Severe Drought Impacts Marinette County Lakes

Boaters, anglers, and cottage owners don't have to be told this, but its official - Marinette County is in a severe drought! Over the last 12 months, precipitation in northeast Wisconsin is more than 9" below normal. In fact, precipitation in northern Wisconsin and the U.P. has been below normal for eight straight years. According to the U.S. Drought Monitor website, a "severe drought" is classified as one where we can expect major crop losses and widespread water shortages in streams, reservoirs and wells.



NE Wisconsin is currently considered to be in an extreme drought stage (map - U.S. Drought Monitor)

Local news accounts and experience shows us this is indeed the case in much of the area. West of Goodman in Armstrong Creek, nearly a dozen residents have had their wells go dry already this year and many more have had to lower their pumps to find water. On many lakes and flowages, falling water levels have rendered many boat landings unusable and made navigation hazardous as underwater rocks, logs, and sandbars are exposed.

Receding water exposing the creek bed

Fish and wildlife communities have also been impacted by the drought. As lake waterlines recede, large areas of lakebed are exposed. This can temporarily eliminate critical spawning habitat such as gravel bars and large wooed cover that are typically found near the shoreline. According to DNR fish biologists, in some cases the reduced runoff has resulted in clearer lakes. While this may be seen as a good thing, it can lead to shifts in fish communities since it favors bass over walleye, which prefer low light conditions. Bass are also better able to adapt to falling water levels since they build nests while walleye rely on wind-swept gravel shorelines for spawning.

Locally, we are starting to see some significant changes to our lakes as a result of the drought. In flowages, reduced runoff means water stays in the flowage longer. This allows the water to warm faster. Combined with the increase in water clarity, we are seeing earlier plant growth, increasing plant density and more nuisance algae blooms. In lakes with significant water level declines aquatic plants are also taking advantage of the shallow water by extending their range further out in to the lake. Floating leaf plants such as pond lilies and watershield have been aggressively spreading in many Marinette County lakes.

Of course, lakes are dynamic systems and the plants and animals inhabiting them have a way of adapting. Indeed, the expansion of aquatic plants into new territory is their way of adapting and moving to a preferred depth. Emergent shoreline plants such as cattails and rushes benefit greatly from extended low water periods. Many of these plants expand outward as they "chase" the waterline. When water levels rise, the flooded emergent plants provide spawning habitat for fish such as perch and northern pike.

So when are we likely to see water levels headed back in the other direction? Nobody can say for sure. Even if precipitation returns to normal and the drought ends today, the water level in many seepage lakes may take years to rebound. This is because seepage lakes are an expression of the local water table and the water table rises and falls slowly. It may take many normal or even wet years to bring the water table back up. Of course, flowages and drainage lakes will respond much more quickly, since they benefit directly from increased runoff. Climatologists predict

Continued next page

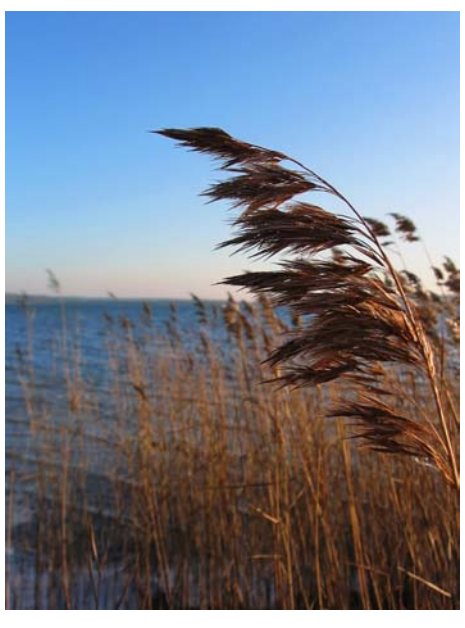
Drought, continued

that global warming will result in wetter winters but dryer and hotter summers in northern Wisconsin. If the predictions are right, the new 'normal' may mean normal water levels in the spring but rapidly falling water levels in the summer. The predicted warming trend will also favor the expansion of aquatic plants and algae.

So what can landowners do now? Unfortunately there is not much people can do to affect water levels. *The best thing landowners can do is resist the urge to "clean up" that newly exposed shore area*. Mowing down emergent plants destroys important habitat for shoreline inhabitants such as frogs and insects. Fallen logs and stumps should also be left in place so they can resume their function when water levels rise.

Landowners can also be on the lookout for invasive exotic species that can take advantage of falling water levels, like purple loosestrife and giant reed (phragmites). These plants are experts at colonizing newly exposed lakebed and can quickly out-compete the native community. If these invaders are spotted, contact the Marinette County LWCD or DNR to develop an eradication plan before a serious problem develops.

Purple Loosestrife



Phragmites

For more information about Wisconsin's drought and its effect on our lakes, visit the following websites:

- *http://www.aos.wisc.edu/~sco/* - the Wisconsin State Climatology office website has state climate records and a wealth of information on climate change and its impacts on local ecosystems.
- *http://www.wisconsinlakes.org/events/09may_lowlake.html* - Presentations and materials from the May 2009 workshop "Declining Lake Levels: Living Lightly on Less Water" can be found on the Wisconsin Association of Lakes (WAL) website.
- *http://dnr.wi.gov/lakes/commonquestions/m* - Answers to some common questions about low lake levels in Wisconsin's lakes, and information about general lake health and ecosystems.
- *http://www.glerl.noaa.gov/data/now/wlevels/levels.html* - National Oceanic & Atmospheric Administration, with other links about drought, climate predictions, lake levels, etc.
- *http://www.drought.gov/* - National Integrated Drought Information System/U.S. Drought Portal. This is a comprehensive website with interactive drought maps, information about drought trends, statistics, and other facts for areas of the United States. Includes recent drought news.

2009 Environmental Poster Contest State Winner ~ Katelyn Nelson!

Each year the Land & Water Conservation Division sponsors the Environmental Poster Contest in conjunction with the Wisconsin Land & Water Conservation Association in the fall as the kids are heading back to school. Every year there is a theme that the students should use when designing their poster. In 2009 the theme was "Dig It! The Secrets of Soil". We had 160 posters come in from 5 different schools in Marinette County.

In 2009, the state winner was Katelyn Nelson from the Goodman/Armstrong Creek School District. Katelyn's poster is pictured below.

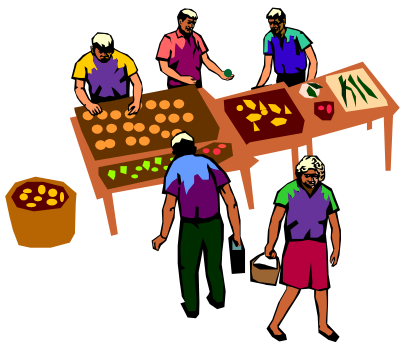
On May 25th in front of the full Marinette County Board, Katelyn received her plaque from Greg Cleereman, County Conservationist (below). Katelyn's poster also went on to the National Contest, sponsored by the National Association of Conservation Districts where she received a certificate. Katelyn was asked to give a speech to the County Board but she politely refused.

Congratulations Katelyn! Look in future editions of the Northwoods Journal for information regarding the Environmental Poster Contest this fall!

Northwoods Journal Online

Would you like to read current issues of the *Northwoods Journal* online? Go to www.marinettecounty.com and click on the link at the bottom of the page. We can even send you an e-mail reminder when each new issue is posted on our website. Please contact Anne Warren, Information & Education Specialist, at awarren@marinettecounty.com or call 715-732-7784 for more information.

Area Farmers & Flea Markets



Marinette Main Street Farmers Market. June 8 – Oct. 29. Tuesday & Friday, 7am to noon or sell out (Saturdays optional). At Merchants Park, corner of Main & Wells Streets in Marinette. Call Denise at 715-732-5139.

Downtown Menominee Farmers Market. Timeless Treasures Antique Mall, 902 2nd St,, Menominee MI. May 22 – October 9th. Saturday market from 9am-1pm, and Thursday market from 3-6pm. Call Lucy at 906-863-8718 for more info. Visit online at *http://www.culinate.com/market/MenomineeHistoryFM*.

Crivitz Flea & Farmers Market. May 27 – Sept. 2, 8am-4pm located at St. Mary's Parking lot across from the Crivitz Village Hall at 800 Henriette Avenue, Crivitz. Interested in participating contact Jean at 715-854-2030.

Crivitz Farmers Market - Green Thumb Garden Shoppe. July 10 – Sept. 25, Saturdays 9am-1pm. Corner County Hwy A and Mira Ave in Crivitz. Visit *http://crivitzfarmersmarket.com* for more info.

Wausaukee Area Farmers Market & More
June 5 – October 2, 9am-2pm, first Saturday of the month. Located one block east of Main street.

Stephenson – Flea Markets at Erickson Park.
July 10, August 7, & September 4. Flea markets at Erickson Park, Stephenson, MI.

Prairie Walk at Harmony

Ever wonder what kinds of flowers live in the prairies and grasslands of Wisconsin? Join us on a free guided hike through the Harmony Arboretum prairie on Thursday, August 5 from 6:00-8:00 p.m. to learn more about our native prairie ecosystems and native plant species such as coneflowers, goldenrods, compass plants, and butterfly weed. Prairie flowers should be near their peak at this time.

Harmony Arboretum is located seven miles west of the City of Marinette off of Highway 64, then ½ mile south on County E. For more information, call the LWCD office at 715-732-7780.

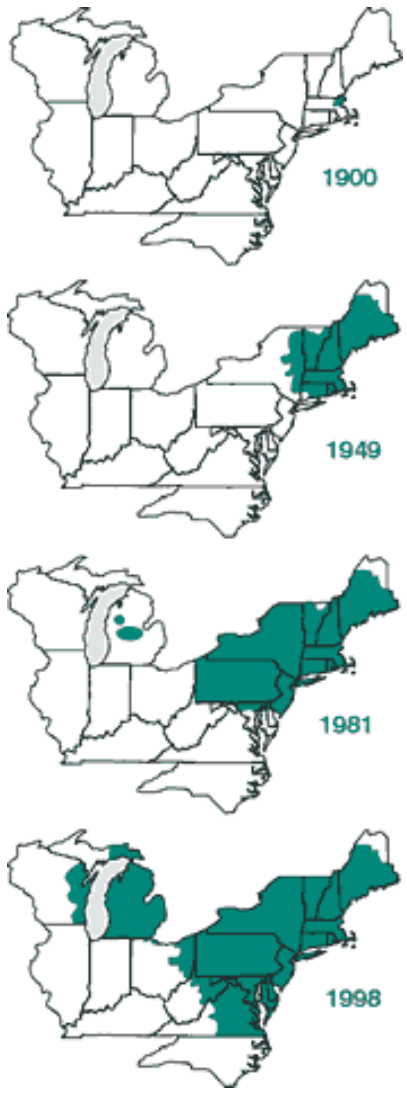
GYPSY MOTHS BACK ON THE PROWL

By Scott Reuss, Agriculture/Horticulture Agent, UW-Extension

Gypsy moth numbers are starting to increase again in many parts of the Marinette County area, as part of their natural population cycle. So, here is a 'refresher course' on control for gypsy moth caterpillars, their basic biology, and other information.

Gypsy moths have the potential to devastate our healthy forests. This is particularly true when we are in a long-term drought like we are currently experiencing. One reason they can be very damaging to our area is that their preferred tree species make up the majority of our forests. Trees that are favored (and needed for young caterpillar feeding) include: oaks, willow, apple, aspen, basswood, birch, tamarack, alder, box-elder, and witch-hazel. However, older caterpillars will also feed on maples, elms, beech, cherry, cottonwood, black walnut, pines, spruces, juniper, and hemlocks. In total, they can feed on up to 500 different tree & shrub species.

As with most serious plant pests, gypsy moths are an introduced species, originally native to Europe and Asia. They were purposely brought to Boston in 1869, and we've been trying to control them ever since. They've been in our area for decades, but have been highly problematic since 1998.



Graphic courtesy Jeanne Gomoll

"Control" is a relative term, however. There are many methods utilized to try to control them, including:

- ✓ Btk (*Bacillus thuringiensis* var. *kurstaki*) - a bacteria
- ✓ Pheromone-bait trapping
- ✓ Chemical pesticides
- ✓ Pheromone flakes as a mating disruptor
- ✓ Parasitic insects
- ✓ Physical control of egg masses and/or caterpillars

Prevention of spread into new areas is the best possible control mechanism, and is the driving reason that all of Northeastern Wisconsin and the U.P. are in a Gypsy Moth Quarantine zone. The Quarantine necessitates inspection of forest and nursery-related products before being shipped out of the zone, to prevent egg mass-contaminated plants from being transported to non-infected areas. *You can help prevent the spread of gypsy moths by thoroughly checking any plant/forest materials you are transporting, as well as RV's, trailers, etc. for gypsy moth egg masses.* This is the #1 method of movement from one area to another.

On a local level, physical control is probably the best control method, but is very time-consuming. Physical control has two primary components: egg mass destruction and trapping & destruction of the caterpillars.

Egg mass destruction is best done in late fall or in late winter/early spring. The flightless adult female moths lay their teardrop shaped, tan, fuzzy egg masses on sides or lower surfaces of tree trunks, branches, roof overhangs, picnic tables, wishing wells, and other suitable places. The best method for egg mass control is spraying them with a 50/50 solution of water and Golden Pest Oil, which is the only product currently labeled for this application. Douse the egg masses with this solution and the eggs then suffocate. Spraying an insecticide on the egg masses will NOT kill the eggs. If the egg masses are on flat surfaces that you can reach, you can also scrape them into a bag and then burn or microwave them. The advantage of egg mass control is that each mass you destroy is about 700 caterpillars not eating tree leaves.

Caterpillar control can be done effectively by physical means on individual trees or smaller groups of trees. Barrier banding or cloth banding are effective methods to reduce caterpillar numbers. As caterpillars crawl up and down the trees during the morning and evening to escape the sun, they can be trapped on a barrier band of tanglefoot-treated tape. Alternatively, you can wrap folded burlap (or other coarse material) around the tree and then go around to the trees, lift the cloth, and cut or crush the caterpillars underneath (note: this is best done in early evening).

Barrier banding on tree trunk - photo courtesy Bob Queen

Continued next page

Gypsy Moths, continued

Proper identification is key to knowing that you are dealing with a gypsy moth infestation. Although all life stages are fairly easy to identify, the caterpillar is the most diagnostic. However, many people confuse gypsy moths and tent caterpillars. There are two keys:

1. Gypsy moth caterpillars are found from mid-May to July, but do not build webs.

2. Older gypsy moth caterpillars have five pair of blue and six pair of red raised dots on their backs.

If you are considering pesticide applications, the best and safest early season choice is to use one of the Btk products. This has to be eaten, so you have to spray it onto the upper leaves of a tree, so may not always work well in forest situations, but protects apples, etc. nicely. Contact insecticides sprayed onto the caterpillars when they are massed at the base of the tree may be better choices for later-season control; on larger trees, anything in the *pyrethroid* family (ending in -thrin such as bifenthrin, cyfluthrin) is probably a good choice, or a standard general insecticide such as *carbaryl.*

If you own acreage, or are involved with a group of neighbors, aerial spraying of the Btk products is an option, usually costing around $40 per acre, but that may vary dramatically according to the exact block size and how many other blocks need to be sprayed in the general area. You can contact Marinette County Land Information, UW-Extension, or DNR Forestry personnel for the list of certified aerial applicators working in our area.

If you want any additional information on this, or any other horticulture topic, contact Scott Reuss at 715-732-7510 or e-mail *scott.reuss@ces.uwex.edu*.

For more gypsy moth information, visit: *http://www.uwex.edu/ces/gypsymoth/homeowners.cfm*

KEEP FIREWOOD LOCAL!

• Emerald Ash Borer (EAB) lives hidden beneath the bark of ash trees & can be transported in firewood.

• Due to the discovery of EAB in Wisconsin, firewood quarantines are in place in several areas. Visit *www.emeraldashborer.wi.gov* for the latest information.

• Hardwood firewood may not be moved out of the quarantine area.

• Stop moving firewood within the quarantine areas, or anywhere in Wisconsin, to help slow the spread of EAB or other pests and diseases.

Wisconsin Emerald Ash Borer Program
www.emeraldashborer.wi.gov
1-800-462-2803

Control Methods for Garlic Mustard

Control strategies must be applied for eight or more years until the garlic mustard seed bank is depleted. Methods may vary over time, depending on the extent of the invasion. Vulnerable areas, especially woodlands, should be monitored each spring to promptly detect new invasions and prevent re-occurrence. Mark areas where plants were found to aid in future monitoring.

Hand Pulling

For smaller infestations or where large groups of people are involved, hand pulling or digging garlic mustard can be effective.

✔ If plants are pulled or dug before budding begins, they may be scattered about the area to dry out, preferably off the ground. Do not put pulled plants in piles where roots may stay moist and development can continue.

✔ Once flowering has begun, all plants must be bagged. **Garlic mustard seeds can still ripen after plants are uprooted!** (using energy stored in stems and leaves.) Pulled plants may be put in plastic bags or large paper bags.

✔ Bagged plants should be disposed of by burning, burying deeply in an area that will not be disturbed, or landfilling. (Please, do not burn plastic bags.) Let garlic mustard collected in paper bags dry thoroughly before burning.

✔ Do not compost garlic mustard. Few compost piles produce enough heat to destroy all garlic mustard seeds.

Cutting

Cutting plants a few inches above the soil surface **just after the flower stalks have elongated but before the flowers have opened** can be effective in preventing seed production and may kill garlic mustard plants. However, some plants may send out new flower stalks that require additional cutting. Monitor site regularly.

Herbicides

✔ **Extensive infestations** – if too large for manual methods – can be controlled by using a 1% or 2% solution of glyphosate (there are many brands). Apply to the foliage of individual plants and dense patches in fall and/or very early spring. **At these times most native plants are dormant, but garlic mustard is green and vulnerable.** Glyphosate is a nonselective herbicide that will kill or injure all green non-target plants. Use caution during application, and spray so that herbicide neither drips from the garlic mustard leaves or drifts onto adjacent desired vegetation.

✔ Use herbicides only when necessary. ***ALWAYS* read the entire herbicide label carefully, following all mixing and application instructions.** Wear recommended protective gear and clothing.

Weed Torch (wet conditions)

Another method for spot-killing patches of newly germinated seedlings in spring is to "flame" them with a propane weed torch. Flames quickly kill tender seedlings, usually without permanently damaging nearby perennial plants. Use the weed torch cautiously, and only when conditions are wet. ***ALWAYS* contact your local fire control agency prior to using this method. Burning permits may be required.**

Continued on page 5

Marinette County's "Mouse-steryious" Mammals

Land & Water Conservation staff gives mammal "Skins and Skulls" educational programs many times each year. At least when I am the presenter, people seem surprised at the number of mammal species that we have in Wisconsin. We have sixty-six species, which include eight species of shrews, and thirteen species of mice, rats, and voles. I call them the "out of sight, out of mind" group because the only time we think about them is if they get into our house, cabin, or garage.

People tend to dismiss these creatures as unimportant and lump them all together under the label of "Mice." However, native mice, shrews, and voles play an important role in our natural world, as prey, as predator, and other biological processes. For the next three issues of the Northwoods Journal we will discuss this interesting, but often overlooked, group of mammals.

Deer Mouse nibbling on a raspberry

In urban areas, we are only likely to encounter the exotic House Mouse and Norway rat, introduced to North America by people. In fact, both species are unlikely to stray far from human dwellings. The Norway rat is a vector for a number of diseases that can affect people, including the bubonic plague. The technical term for the relationship these species have with people is *commensal*. This describes a symbiotic relationship in which one species is benefited while the other is unaffected. The term comes from a Middle English phrase meaning "sharing a meal." Basically, these two species depend on us for food and shelter. They eat our stored food and food we throw away. The House Mouse especially, cannot tolerate cold or survive a northern winter outdoors. Without us, it's unlikely that these two animals could persist in northern Wisconsin in significant numbers.

Common House mouse

Biology and Habits

Of the three mice native to Wisconsin, only the Deer Mouse and White-footed Mouse are found in Marinette County. If you've spent time in an older woodland cabin or rural home, you've probably seen White-footed Mice or their handiwork. The White-footed Mouse is one of most common rodents found in deciduous forests. They range from 5-8 inches in length, with about 42% the length being tail. They have large blackish ears with a thin white border. They are gray except for reddish fur on their back. The belly and chest is solid white.

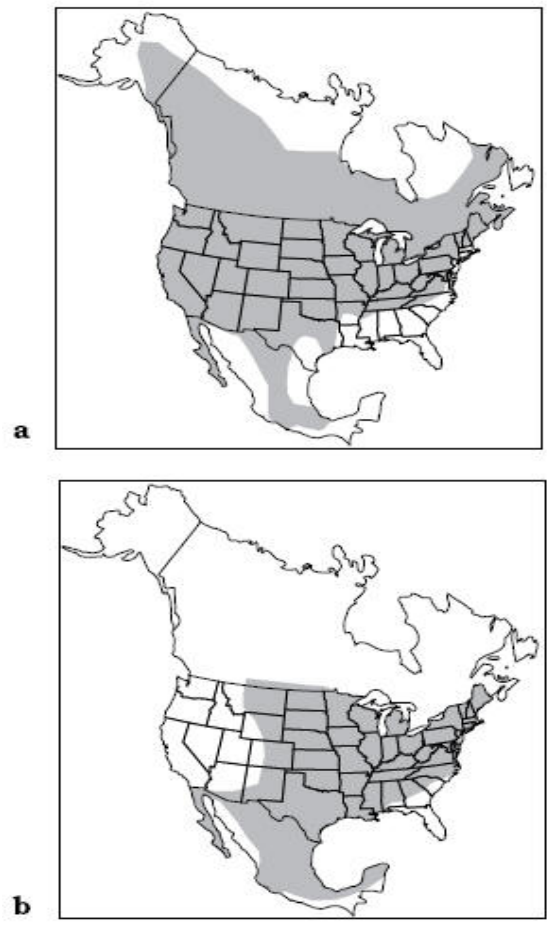


Fig. 2. Range of the deer mouse (*P. maniculatus*) (a) and white-footed mouse (*P. leucopus*) (b) in North America.

Graphic from www.icwdm.org

In Marinette County, their breeding season is seasonal, mostly occurring in spring and late summer. The gestation period takes 3-4 weeks; young are born blind and hairless. Their eyes open after two weeks and they are weaned after another week.

White-footed Mouse suckling pups

White-footed Mice are ready to mate after 44 days and have 2-4 litters of 2-7 mouselets (or pups) each year. The reason we are not overrun with mice is that the mortality rates are astronomical. On average, there is almost complete replacement of the White-footed mice (and other members of this group) each year.

The female White-footed mouse builds a 6" to 10" nest from any soft material available, both natural or man-made. The material is simply placed in a pile after which the female worms its way in and uses body contortions to create a cavity large enough to hold her and her brood. The nest might be placed under a log, in a stump, or even in a drawer out in your garage. I even found a nest under the cowling of my lawn mower.

White-footed mice are omnivores that forage in trees, on or under the ground, and under deep snow. They are generally nocturnal. About 70% of their diet is nuts and seeds, grasses, and berries. Protein, especially in the form of grubs and caterpillars, makes up the other 30%. In

Continued on page 7

Where in Marinette County?

Tell us where this photo was taken and you could win a prize!

To enter, send a note including your name, address, and phone number or email awarren@marinettecounty.com. Any interesting facts about the subject are also welcome. Correct answers will be entered in a drawing for a tote bag of goodies. *Please respond by July 12, 2010 to be entered in the drawing.*

No one guessed June's photo, a picture of the Anlove Farm barn highway 180 (below).

Garlic Mustard, continued from page 4

Preventing Further Spread

✔ Clean shoes, pockets, pants cuffs and equipment thoroughly after walking or working in infested areas. Garlic mustard seeds are tiny and are often carried off in clothing, shoes and mud.

✔ Survey your area for green garlic mustard plants. Plants can be spotted any time they are not covered by fallen leaves or snow.

✔ When you find an infestation, remove plants that are producing seed first, working from the least infested to the most infested area. Then remove other plants, again starting with the least infested areas.

✔ Monitor non-infested woodlands carefully and frequently. Removing one or two plants before they go to seed is much easier than removing hundreds or thousands later on.

Websites

- *http://tncweeds.ucdavis.edu/esadocs/allipeti.html* - An extensive summary of information about garlic mustard. The Nature Conservancy also has information on many other invasive plants.
- *http://dnr.wi.gov/invasives/fact/garlic.htm* A summary of garlic mustard information from the Wisconsin DNR, with links to other sites.
- *http://www.botany.wisc.edu/Wisflora* Photos and information on all Wisconsin plants.

Japanese Knotweed – a Major Threat to Wisconsin's Waterways

Information taken from *http://clean-water.uwex.edu/pubs/pdf/inv.knotweed.pdf*, published by

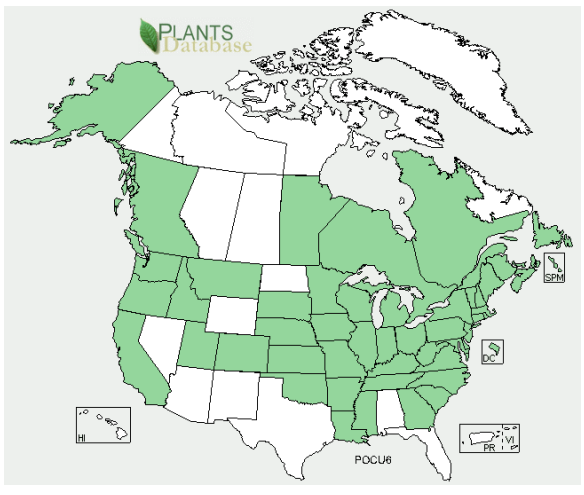
Picture your favorite trout stream or canoeing river lined for miles with a tangle of rigid, bamboo-like stems ten feet tall. These canes confront you like prison bars, and to get through them you have to use a machete to hack your way to the water's edge. Once there, you find that the fish have disappeared and that you can't move up or down the shoreline. You can enter the waterway only where you chopped your way in.

Note person at left near this stand of Japanese Knotweed

This is the unfortunate scene on some rivers in the Eastern United States now, and could be along many of Wisconsin's streams and shorelines in the future if Japanese Knotweed is allowed to begin colonizing them. Fortunately, we can take action now to ensure that our wild waterways, lakeshores, and wetlands remain open and accessible for future generations.

Where did it come from?

The plant is a large, aggressive perennial from Asia that was exported without the insects and diseases that control it at home. Introduced to Europe by 1800, it has alarmed country after country there with its rapid spread and difficult control. Japanese Knotweed appeared in the US in the late 1800s and has since spread across the continent from Northeast Canada to South Carolina, and west to the Pacific (see map.) It is now a plant of great concern in most states. Below is a map showing the current North American status of Japanese Knotweed. Over half the counties in Wisconsin have reported the presence of Japanese Knotweed.



Spread through planting

The experiences of other countries and states are being duplicated here and are cause for alarm. Brought to Wisconsin in the mid-1900s, the species is planted in urban areas around the state. However, many landowners now regret having it on their land, as it usurps garden space and encroaches on the rest of their property. One unhappy man in Green Bay has been mowing this plant for forty years, unable to eliminate it from his lawn! Once established, this plant defies control, with roots that grow as deep as 9 feet and rhizomes (horizontal roots that send up shoots) that grow out to 60 feet. Though it dies to the ground with the first frost, every spring it sends up numerous early shoots along the whole length of these rhizomes. The rhizomes can also push their way under streets and up through pavement.

Where does it grow and why is it invasive?

- ✓ Appears in such places as shady woods and dry uplands, but of main concern are patches found in valuable open wetland habitats and riparian areas.
- ✓ Grows faster and taller than most native herbs; its long rhizomes quickly form dense thickets up to several acres in size that shade out native plants, reducing site biodiversity.
- ✓ Is food for few native insects or other animals, which contributes to its vigorous growth, but makes its sites of little value to wildlife.
- ✓ Creates bare ground under its clones, which results in faster erosion and more flooding, and makes stream banks more vulnerable to flood damage.
- ✓ Spreads quickly, both filling up its sites and spreading to new ones, especially when stream banks are undercut and fragments of stems and roots fall into the water and are carried downstream.

At this time, eradication of Japanese knotweed from the landscape is unlikely since it grows in so many locations and its clones are so difficult to eliminate. Thus, control on a watershed scale should be considered. **Highest priority should be given to sites where it has established along water courses, starting at the top of the watershed. High priority should also go to eliminating any plants producing seeds, regardless of location.**

Japanese Knotweed can grow to10 feet tall

Identification

- ✓ Upright, semi-woody, shrub-like herb that can grow 10 feet tall

Continued next page

County Landfill & Area Recycling Information

MAR-OCO County Landfill
(Marinette and Oconto Counties)
N7785 Shaffer Road, 5 miles west of Crivitz off of County Rd. A
(715) 854-7530

2010 Hours
Monday-Friday, 8 a.m. – 4 p.m.
1st & 3rd Saturdays, April – October
8 a.m. – 12 p.m.
Closed all other Saturdays, Sundays & holidays

Yard waste, liquid waste, automobile parts, & recyclables are not accepted. Disposal fees apply.

For more information, visit online at www.marinettecounty.com

Recycling Centers

Town of Stephenson
Twin Bridge site, County X
Tuesday, Saturday, Sunday
9 a.m. – 4 p.m.

Crivitz site, August Street
Wednesday and Saturday
9 a.m. – 4 p.m.

Newspaper, cardboard, magazines, glass bottles and jars, tin cans, aluminum, plastic containers (1 & 2), used motor oil, car batteries, scrap metal & yard waste accepted. For more information visit online at *http://www.stephensonwisc.com/*.

Town of Peshtigo
W1945 Old Peshtigo Road
2nd, 4th, 5th Saturdays each month
8:30 a.m. – 12:30 p.m.
1st, 3rd, 5th Wednesdays each month
12:30 p.m. – 4:30 p.m.

We accept tires, appliances and air conditioners with Freon, stoves, microwaves, washers, dryers, any kind of metal (no motor vehicles), televisions, automotive oil (no cooking oil or antifreeze), paper, cardboard, plastic, glass, aluminum, tin, batteries, bagged garbage and yard waste. No paint or hazardous materials. Some fees may apply. Visit *http://townofpeshtigo.org* for more information. Residents only.

Township of Athelstane
(715) 856-6428
Wednesday, 12:00 – 4p.m.
Saturday, 12:00 – 4p.m.
Sunday, 8a.m.– 4p.m.

Cans, cardboard, brown & clear glass, magazines, paper, plastic #1 & #2, and drain oil accepted; no building materials or paint. Some yard waste accepted. Fees may apply. For more information visit: *http://athelstanewi.com/recycle.htm*.

Mice, continued from page 5

preparation for winter, White-footed Mice place nuts and seeds into cavities or under logs. Sometimes squirrels or other mice find these caches and steal the contents - in a harsh winter, this may condemn the mouse to death by starvation.

Deer Mice are about 20% smaller than the White-footed Mouse. They are similar in appearance to the White-footed Mouse, although generally darker and the reddish back is less defined. The Deer Mouse has a more distinct tuft of hair on its tail, which is longer when compared to its body than the White-footed Mouse.

Deer Mouse

The Deer Mouse has one of the most extensive ranges of any North American mammal, including the entire continental United States except for the Southeast. In Marinette County they choose forests, regenerating clear cuts, and recent burns for preferred habitat.

Like the White-footed Mouse, Deer Mice are generally nocturnal. They spend the daylight hours in their softball-sized nest of grass and leaves, which is lined with softer material like hair or feathers. Also like White-footed Mice, Deer Mice are solitary during warmer months but willing to join a small group of 2-5 other mice to keep warm in cooler months. The nest is typically associated with wood such as a rotting stump, under a log, or tree cavity.

Deer Mice are true omnivores with almost 50% of their nutrition coming from protein. Following their sense of smell, and mostly at night, these animals feed on primarily on seeds and insects, but also earthworms. In agricultural areas Deer Mice also add corn and soybeans to their diet. In heavily forested areas the mice focus more on nuts, berries, and conifer seeds. They also hide food for winter usage.

Deer Mouse foraging for food

Also like the White-footed Mice, mating season for Deer Mice is in spring or early summer, tapering off in the fall. If she lives long enough, an adult Deer Mouse can raise up to four litters per year, typically with four mouselets per litter. A first year mouse may only raise one or two litters. In captivity, Deer Mice have been known to live for eight years, but in the wild, very few live longer than a year. Like most small mammals, producing large numbers of young is their survival strategy.

Significance and Importance to Ecosystems

All of our small mammals are an important food source for snakes, birds of prey, other mammals and even fish. Domestic dogs and cats are well known to kill, if not eat, mice. Research has suggested that pioneering small mammals may be important seed sources for forest regeneration after disturbances like fire or clear-cutting. *Ectomycorrhizal fungi* are a type of fungus that grows on the roots of important trees such as pines, oaks, and birches. These fungi make the plant more disease resistant, aid in the uptake of nutrients in mineral soils, and make the trees more drought resistant. The fungi depend on being consumed by small mammals for dispersal.

Small mammals increase the decomposition rates for vegetation, returning organic matter to the soil to support further plant growth and improve soil quality, and are also important for mineralizing organic matter. This is how important soil nutrients such as nitrogen are returned to the soil in form that is usable by plants.

Habitat Needs

Like every creature on Earth, Deer and White-footed Mice need the four components of habitat: food, shelter, water, and space. Research from across the United States has shown a couple of habitat elements that are accurate predictors of the presence of small mammals. By far, the most important habitat component is coarse woody debris, in the form of dead snags, rotting stumps, and fallen logs. Next in importance is the presence of a substantial shrub and ground cover layer. Forest habitats without these components will support fewer small mammals than a more complete forest habitat.

Both species of mice have surprisingly large territories that range from a quarter to a twelfth of an acre, depending on habitat quality.

"Mouscellaneous" Facts

- Deer Mice are very often used for laboratory experimentation due to their self-cleanliness and easy care.
- High numbers of White-tailed Deer are known to suppress the number of small mammals by directly competing for food sources such as acorns and by eating the shrub and ground cover layers which reduces the amount of shelter for them.
- Individual White-footed Mice have shown keen homing instincts. In experiments, they have found their way home after being released two miles away.
- Although we don't know why, White-footed Mice are known to drum on a hollow reed or dry leaf with their front paws to produce a long musical buzzing.
- While nursing, Deer Mice carry their young clinging to her nipples or one at a time in her mouth.
- Although not true hibernators, during the winter Deer and White-footed Mice may enter a daily torpor to reduce body temperature and conserve energy.
- Finally, Deer Mice are hosts for a strain of Hantavirus. This virus, which can be contracted by humans from Deer Mice, their droppings, or urine, causes an often fatal disease termed *Hantavirus pulmonary syndrome*.

This article was largely based on Mammals of the Great Lakes by Allen Kurta. Additional information was obtained from the University of Michigan Museum of Zoology Web.

Knotweed, continued from page 6

- ✓ Stems: resemble bamboo, smooth and hollow between swollen joints that have a have a membranous sheath, often tinged with red, with few branches
- ✓ Winter stems: usually stout, persistent, rust-colored and appear very numerous
- ✓ Leaves: variable, normally about 6 inches long by 3 to 4 inches broad, heart shaped to somewhat triangular with a pointed tip
- ✓ Flowers: very small, greenish-white, arranged in attractive, branched sprays in late summer
- ✓ Fruits: small and winged, with tiny, triangular, shiny seeds
- ✓ Grows in dense stands that often line high light areas such as stream banks and moist roadsides, and may be up to several acres in size
- ✓ Sprouts very early in spring and grows fast, quickly towering over other plants

Control Methods

Currently, the most effective control method is using chemicals/herbicide, but mechanical and biological means are also used. For more detailed information about specific control methods for Japanese Knotweed, or general invasive species information, visit the following websites:

1. *dnr.wi.gov/invasives/plants.htm*
2. *tncweeds.ucdavis.edu/esadocs/polycusp.html*
3. *www.invasiveplants.net/InvasivePlants/Knotweed/Knotweed.asp*
4. *www.nps.gov/plants/alien/fact/pocu1.htm*
   www.invasiveplants.net/InvasivePlants/Knotwed/Knotweed.asp

If you would like to learn more about preventing and controlling aquatic invasive species impacting Marinette County, please refer to the County website (Marinette County home page → Departments → Land Information → Aquatic Invasive Species) or contact Robert Ruleau at 715-732-7642.

Northwoods Journal
Volume 8, Issue 2

The *Northwoods Journal* focuses on various outdoor recreation opportunities and local environmental topics to inform readers about natural resource use, management, and recreation in Marinette County.

Published in cooperation by:

- Marinette County Land & Water Conservation Division
- Marinette County Parks & Outdoor Recreation Department
- University of Wisconsin-Extension

UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA. To ensure equal access, please make requests for reasonable accommodations as soon as possible prior to the scheduled program. If you need this material in another format, please contact the UW-Extension office at 715-732-7510.

Please send comments to:
Marinette County Land & Water Conservation
1926 Hall Ave, Marinette, WI 54143
(715) 732-7780
awarren@marinettecounty.com

Area Events Calendar

June-August **Bands at Badger Park**. Free concerts Wednesday evenings 6:30-8:30pm in Badger Park, Peshtigo. Concessions available at 5:15pm. Scheduled dates: 6/30, 7/14, 7/28, 8/11 & 8/ 25.

June-August **Sunset Concert Series**. Free concerts Tuesday evenings at 7pm on Stephenson Island in Marinette: 6/22, 6/29, 7/3, 7/4, 7/13. Contact Joe at 715-863-2679 for more information.

July-August **Concerts in the Park.** Free concerts Thursday evenings at 7pm at the band shell in Great Lakes Memorial Marina Park in Menominee, MI.: 7/8, 7/15, 7/22, 7/29, 8/12. Contact Joe at 715-863-2679 for more information.

June-October **Peshtigo Fire Museum Open.** Museum located on Oconto Avenue in Peshtigo will be open through October 8. Hours are 7 days a week from 10am-4pm. For more information call the museum at 715-582-3244.

July 3-4 **Area 4th of July Celebrations & Water-ski Shows.** Marinette, Crivitz, Goodman, Wausaukee. For more information, call local city hall or visit the county calendar at *www.marinettecounty.com*.

July 8-10 **2nd Annual Northeast Poker Run & Swap Meet.** Three day poker-run through Marinette County with proceeds to benefit Crivitz area food pantries. $10 poker run fee, 70% payout. Saturday swap meet 10am-5pm, live music to follow, card draw at 7pm. There are additional events at individual sponsors.

July 9-10 **Rummage on the River.** Multiple sale locations in the city of Peshtigo and town of Peshtigo. Maps showing rummage sales locations will be available. To be included in the rummage sale, contact: Peshtigo Chamber of Commerce, 715-582-0327; Pat Roland, 715-582-3360; Peshtigo Times, 715-582-4541.

July 10 **Aurora MACC Run/Walk.** Joint effort between the Marinette Menominee Area Chamber of Commerce and Aurora Health Care is set for 8am at Marinette High School. The 5K run/walk and 10K run draw many participants each year.

July 10 **Athelstane Fire Department 50th Anniversary.** Picnic and parade beginning at 11am.

July 16-18 **Menominee County Fair.** Shakey Lakes Park, 8am-11pm each day. Visit Menominee County website at *www.menomineecounty.com* or call Kandace at 906-753-2209.

July 17 **10th Annual Hot Rod & Harley Show.** 9am-4pm at Vandervest Harley-Davidson, 810 Frontage Road, Peshtigo. Registration required. Trophies, food, refreshments, raffles & music. Open to the public. Proceeds go to local charities.

July 24-25 **Brown Trout Derby.** Menominee Marina. M&M GLSF Brown Trout Derby, Menominee Marina. Fee $15. For more information call 906-864-1117.

July 31 **Wagner Fire Department 30th Annual Fundraiser Picnic.** Menominee River Park, Hwy 180 and Cty Hwy X from 11am-8pm. Music, kids games, horseshoe tournament, raffles, paddle wheel, food and refreshments. Tickets sold at Heritage Inn, McAllister; Bear Point, Wausaukee;, Camp Shakey, Stephenson, MI; Evergreens and Legends in Porterfield; or any fire department member.

July 31 **Menekaunee Old Timers Picnic.** Red Arrow Park starting at 12 noon for anyone 50+ with ties to Menekaunee. Bring your own lawn chairs & beverage. Cost is $12 if paid by July 26 or $15 if paid later. Send checks to Menekaunee Old Timers, 160 W Bay Shore Street, Marinette, WI 54143. Call 735-5577 with questions.

Update on the Children's Learning Garden at Harmony Arboretum

We are making great progress at the Children's Learning Garden! In June many elements were placed in the CLG, including the pioneer cabin, the Native American garden, and the hedge maze. The wetlands area is getting its plants established, and by July the 'critters-eye-view' tunnel structure will be built. We need volunteers to paint large murals across the front of the structure including elements like huge tree roots, boulders, woodland animals, plants, etc. The goal is to have visitors envision themselves as the size of an underground critter (like a chipmunk or ant) so everything has to be on a BIG scale! If you are interested in volunteering, workdays are Thursdays from 8:30am-noon and 4-7pm. Call Linda Warren, UWEX, at 715-732-7510 for more information. The NWJ will keep you up-to-date on the progress at the Children's Learning Garden throughout the summer.

A view of part of the sundial; at left, the Native American Garden; upper right, the Pioneer Cabin.

The wetland plants are being installed and getting used to their new home.

Marinette County
Harmony Arboretum
gardens: prairie: hardwood forest
½ mile south of Hwy 64, on County E
UW Extension : 715-732-7510
Land Information Office: 715-732-7780
http://www.marinettecounty.com

Upcoming Events

July 10 – Early Vegetable Tasting & Pest Management , 10am-noon – Experience the fantastic flavors of early season vegetables as well as identify & manage vegetable pest problems.

July 10 – Garden Walk. Take a walk through some spectacular local gardens, including Harmony Arboretum, and help raise money for local charities! Call UWEX for more details. $8.00 donation requested.

August 2 – Plant Disease Symptoms, 6-8pm Join Dr. Brian Hudelson, UW Plant Disease Diagnostician, to learn more about plant diseases, what they look like on different plants, and management tips.

August 5 – Prairie Walk, 6-8 pm – Tour the 17 acre prairie at Harmony Arboretum with local native plant enthusiasts. Spend an evening learning about prairie plants, their importance, and why people are creating or restoring them. The prairie flowers should be nearing their peak at this time.

Located seven miles west of the City of Marinette off of Highway 64, then ½ mile south on County E. *All programs are free unless otherwise stated.* For more information, call UWEX at 715-732-7510 or LWCD at 715-732-7780.

Coneflower at the Harmony Prairie